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7.5 T/D NYLON EXPANSION PROJECT

AID Loan No. 489-H-036

PROGRESS REPORT

Number (1)

F o r

4 Months <April 1967 — July 1967>

PREPARED BY

KOREA NYLON COMPANY

F O R

KOREAN GOVERNMENT

A N D

UNITED STATES

DEPARTMENT OF STATE

AGENCY FOR INTERNATIONAL DEVELOPMENT

A.I.D.
Reference Center
Room 1656 NS

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CHAPTER I. PROJECT HISTORY AND DESCRIPTION

To meet rapidly growing domestic consumption of nylon filament yarn, Korea Nylon Company (Kolon), which has annual production capacity of 2,800,000 lbs (2.5 T/D Plant) of nylon filament yarn, is now expanding its existing plant up to 8,800,000 lbs (10 T/D Plant) by adding 6,000,000 lbs (7.5 T/D) financed with US\$5,810,000 of A.I.D. Loan at existing plant site in Taegu as the attached location map and layout drawing show.

The 7.5 M/T Expansion Project was planned early in 1962 by the executive members of Kolon. Kolon submitted its Expansion Project Plan to the Economic Planning Board (EPB) in November 1962, and was approved by the Government in March 1964. In the meantime, existing 2.5 M/T plant was inaugurated in August 1963.

In February 1965, the Loan Application for the 7.5 M/T Expansion Project was transmitted to A.I.D. with the recommendation letter of the Minister of EPB. The Expansion Project was carried through National Advisory Councils Committee of A.I.D. on May 6, 1966 and A.I.D. formally announced its approval of the projected loan later on May 12, 1966.

The Loan Agreement to finance for US\$5,810,000 was executed by and between Vice-Director of the United States Operations Mission to Korea, the Minister of EPB and President of Kolon on June

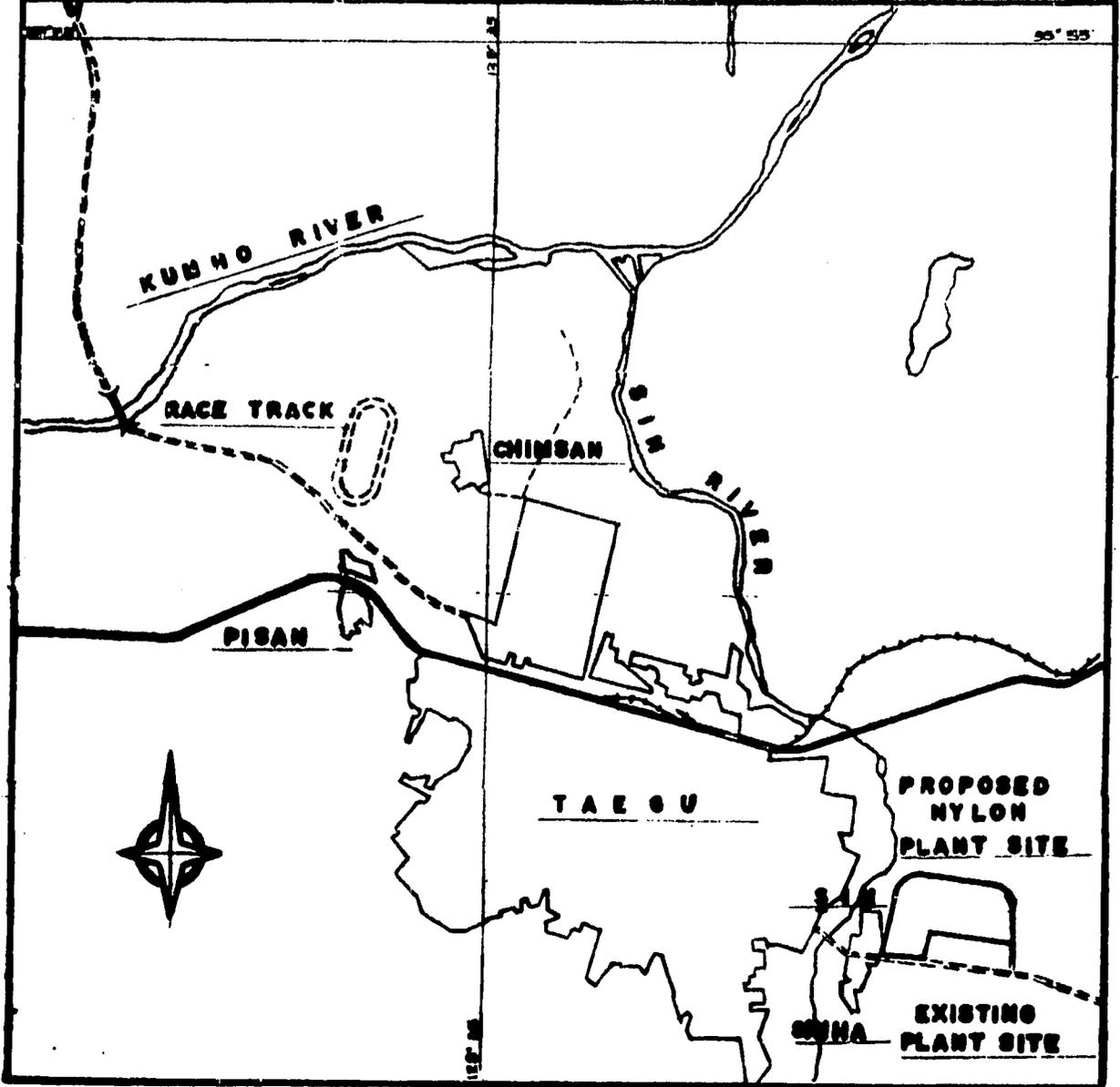
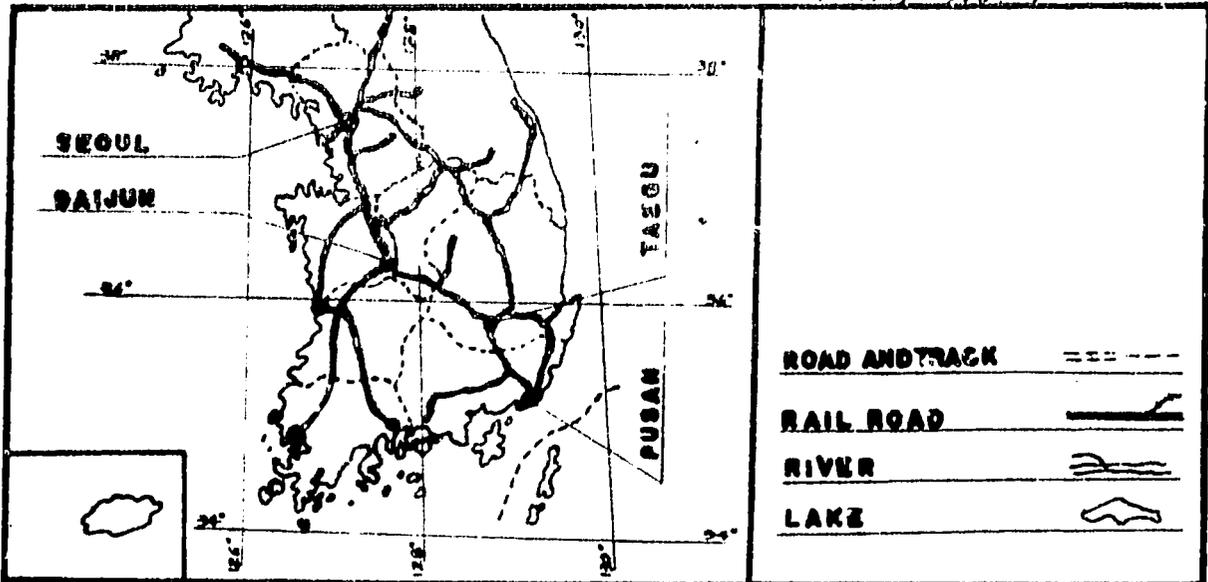
15, 1966 at the EPB Conference Room.

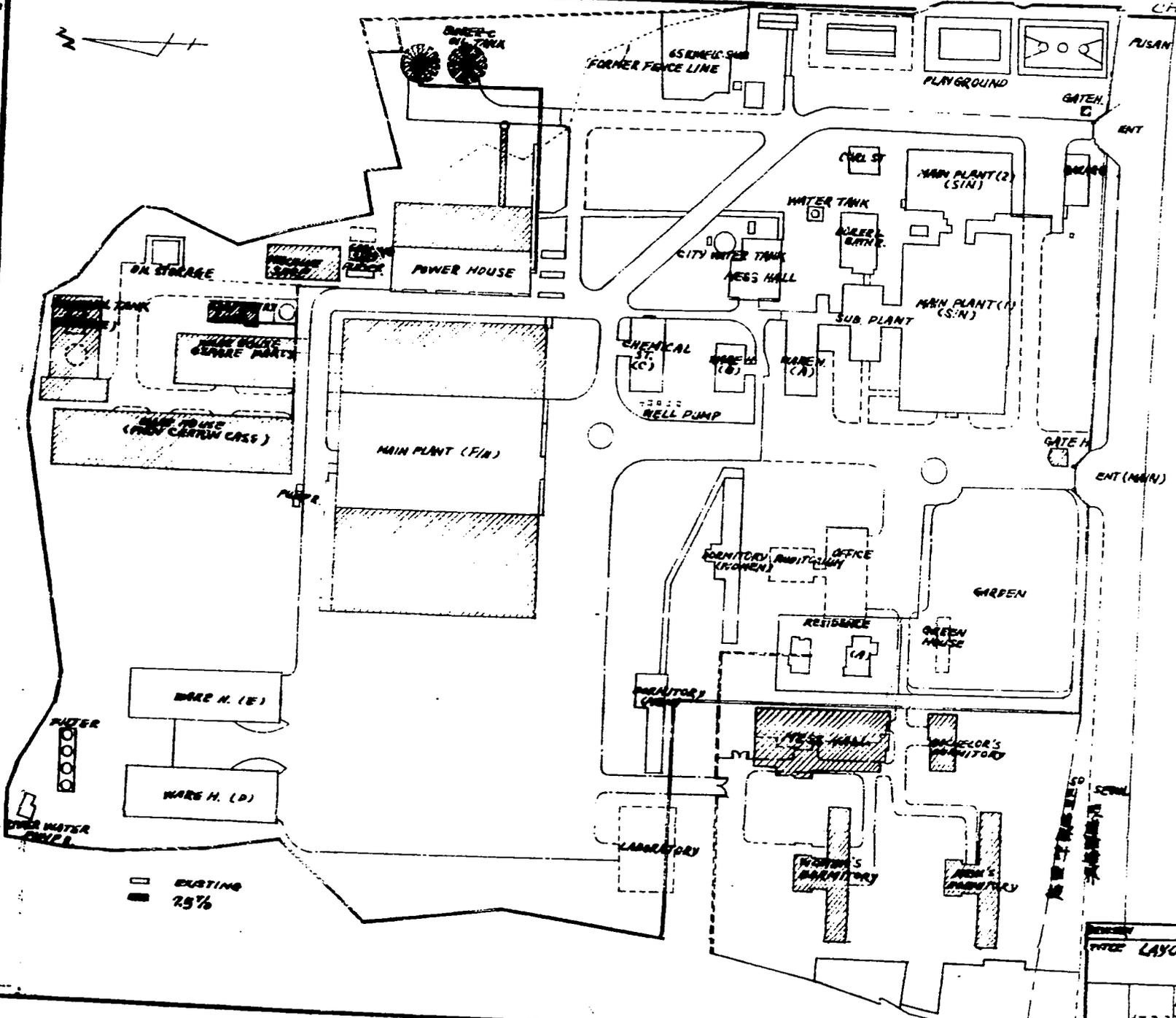
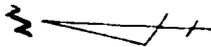
In accordance with the provision set forth in Section 3.(b) of the Loan Agreement, the Fixed Price Contract (an engineering service contract) for the procurement of equipment, know-how and engineering services was executed by and between Kolon and Chemtex, Inc. (Chemtex) on November 30, 1966.

After Kolon fulfilled the conditions precedent provided in Section 3 of the Loan Agreement, A.I.D. issued an integrated Letter of Commitment for US\$5,810,000 (L/Com No. 489-H-03601) on February 6, 1967 to the Irving Trust Bank in New York designated by us.

And then Kolon opened a letter of credit for US\$5,810,000 through the Foreign Exchange Bank of Korea to the Irving Trust Company for Chemtex's benefit on March 22, 1967.

With these procedures, the ground-breaking ceremony was held, at last, on April 8, 1967 at the existing plant site in Taegu.





□ DUSTING
 ▨ 75%

CHANGE OF APPROVAL	
LAYOUT PLAN	
KOREAN MILITARY LTD	
67-2-22 27-5-2 TAECHON	
SCALE 1/	A-003

CHAPTER II ENGINEERING ACTIVITIES

As mentioned above, Kolon employed Chemtex, Inc., which provided equipment procure by itself and rendered technical know-how and services for the existing 2.5 M/T plant and successfully fulfilled its responsibilities, as an engineering service company for the expansion project. The following is an extract from the Fixed Price Contract, an engineering service contract made between Kolon and Chemtex, and it will help you to figure out the outline of Chemtex's engineering activities pertinent to the construction of 7.5 M/T plant expansion.

"In general, Chemtex shall be charged with the responsibility of directing the entire project, of designing the major part of nylon expansion and of supervising that part of the design to be done by Kolon of providing imported equipment, of providing technical know-how, instructions and assistance required to put said nylon expansion into production, all as more fully hereinafter set forth..."

Chemtex has furnished us drawings and designs pertaining to Flow Sheet, Arrangement and Layout, Foundation, Structural, Tank, Electrical, Spare Part & Equipment partially. Detailed drawings list as of July 31, 1967 is as follows:

DRAWING LIST

FLOW SHEET

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
3/13/67	38028	Delustrant Preparation
"	58267	Polymerization
"	58268	Spinning & Finish
"	58270	Monomer Extraction

ARRANGEMENT AND LAYOUT

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
7/10/64	SK 5572	Building Layout Expansion to 10 Ton
7/15/66	SK 5714	Outline for Expansion to 10 T/D
10/14/66	52814	Outline for Expansion to 10 T/D
2/4/67	52951 - 0	Ground Floor & Sections
"	52952 - 0	Upper Floor & Sections
"	52953 - 0	Textile Area
"	SK - 5756	Spinning Area
3/28/67	52961	Power House Plan
"	SK - 5762	Monomer Recovery System - proposed -
"	SK - 5758	Floor Design at Air Quench
"	SK - 5759	Floor Design at Extruder
4/18/67	52951	Ground Floor Plan & Sections

ARRANGEMENT AND LAYOUT (cont'd)

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
4/18/67	52952	Upper Floor Plan & Section
"	52954	Ground Floor
"	52955	Polymer Preparation 2nd Floor
"	52956	Polymer Preparation 3rd & 4th Floor
"	52957	Extruder Mezzanine
"	52958	Extrusion Wind-Up Section
"	52961	Power House - Ground Floor
"	42106	Power House - 2nd Floor & Roof
"	SK 5758	Floor Design at Air Quench
7/20/67	53121	Burn Out Room
7/28/67	42106 - 0	Power House Plan - 2nd Floor & Roof

FOUNDATION

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
2/4/67	52965 - 0	Textile Area
3/28/67	52967	Polymer Preparation - Ground Floor
"	52968	Polymer Preparation - 2nd Floor
"	52971	Extruder Floor Mezzanine
"	52972	Chip Feed Area - 3rd Floor
"	42052	Chip Dry & Wash - 4th Floor

FOUNDATION (cont'd)

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
4/18/67	52965	Textile Area
"	52967	Polymer Preparation - Ground Floor
"	52968	Polymer Preparation - 2nd Floor
"	52971	Extruder Floor Mezzanine
"	52972	Chip Feed Area - 3rd Floor
"	42052	Chip Dry & Wash - 4th Floor
6/7/67	52968 - 0	Polymer Prep. - Air Quench
6/26/67	52972 - 0	Chip Feed Area-3rd Floor
7/4/67	52972 - a	Chip Feed Area - 3rd Floor
7/10/67	52975	Power House
7/20/67	52976 - 0	Power House
7/28/67	52974	Power House Roof Plan

PIPINGS

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
7/25/67	A - 1045	Bunker - C Piping Drawing Structural
7/28/67	52971 - 0	Pump Block Structural Support

TANK

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
7/10/67	53036 - 0	Monomer Extraction Tank
"	53038 - 0	Monomer Melt Tank

TANK (cont'd)

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
7/21/67	53039 - 0	Molten Moncmer Storage Tank
"	42085 - 0	Chip Transfer Bin
"	42086 - 0	Extruder Feed Hopper
7/25/67	42093 - 0	Prepolymerizer
"	52119 - 2	Pack Preheater

ELECTRICAL

<u>DATE</u>	<u>DWG NO.</u>	<u>DESCRIPTION</u>
7/20/67	53007	Power House - Underground Cable Vault
"	53008	" " "
"	53009	Power House - Underground Conduits Layout
"	53010	" " "

SPARE PART & EQUIPMENT

<u>DWG NO.</u>	<u>DESCRIPTION</u>
DM - 20	DT Bobbin 12"
DM - 21	DT Bobbin 13"

Two (2) engineers of Chemtex came to Kolon and stayed for eight (8) days from June 9, 1967 to June 17, 1967 in order to discuss fundamental engineering problems concerning the Expansion Works. They also visited the 7.5 M/T plant site in Taegu.

Since machinery installation will begin in October 1967 according to the construction schedule, no Chemtex personnel for field engineering are necessary at this time. Engineering personnel of Chemtex are scheduled to come to Kolon in order to conduct and supervise the construction works from September.

The field engineers staying schedule mutually agreed upon in principle between Kolon and Chemtex is as follows:

1. Erection Engineers: From middle of September to the time of plant completion.
2. Utility engineers (Electrical):
From latter part of October to the time of plant completion.
3. Process engineers: From early part of December to the time of plant completion.

Engineers Staying Schedule

Engineers by Field	Staying Schedule								
	'67 9	10	11	12	'68 1	2	3	4	5
Erection Engineers									
Utility (Elec- trical) Engi- neers									
Process Engi- neers									

CHAPTER III CONSTRUCTION ACTIVITIES

The Construction Contract of the main plant building was signed on April 5, 1967 between Kolon and Sam Hwan Enterprise Co., which had an experience of constructing Kolon's existing 2.5 M/T plant successfully in 1963. The construction work of main plant building started on April 8, 1967 and progressed to 41.9% as of the end of July 1967, and scheduled to be completed on Dec. 31, 1967.

The construction work has been progressed smoothly without any delay, and the actual construction progress rate has always been exceeded its scheduled rate. (Please refer to construction progress chart) Chart No. 3 shows the current status of the main plant building construction in major items of works and the attached photographs are showing the whole view of vivid construction progress status.

Other auxiliary facilities such as power house, bunker-C oil tanks, and diesel oil tanks were set about during the report period. Following table are showing the detailed status of each auxiliary construction work.

CONSTRUCTION PROGRESS CHART (MAIN BUILDING).

Chart No. 3

Name of Works	Weight	4	5	6	7	8	9	10	11	12	
Temporary Work	8.47	0	3.13	15	22.95	33.47	48.52	68.46	79.40		
						38.64					
Reinforced Concrete Work	35.28	0	5	30	50	75	100				
						92.41					
Water Proofing Work	10.40						0	60	100		
Plaster's Work	15.22			0	1	3	10	40	70	95	100
						3.92					
Other Works	30.63		4.46	12.55	14.97	19.55	36.41	68.00	75.28	89.41	100
						18.77					
Total	100	0	3.40	16.27	24.89	36.30	52.63	74.26	86.13	94.95	100
						41.91					

———— ESTIMATE

----- ACTUAL

Table of Auxiliary Construction Work

As of July 31, 1967

Name of Works	Date of Contract	Name of Contractor	Actual Progress Rate
Power House Expansion Work	6/18/67	Sam Hwan Enterprise Co.	11.52%
Bunker-C Oil Tanks	Foundation & Surfacing Work	"	100.00%
	Fabrication & Establishment Work	Soo-Do Co.	77.17%
Diesel Oil Tank (Fabrication & Establishment Work)	7/6/67	"	88.24%

The architectural drawings of F/N main plant building were designed by Professor Hichoon Kim, the very person designed the existing 2.5 M/T plant building.

Kolon also has received some technical informations (instructions, drawings, basic data) from vendors who manufacture the expansion equipments according to the purchase orders placed by Chemtex. The following is the list of vendors' informations we have received on June 26, 1967.

VENDORS' ENGINEERING INFORMATION

<u>Drawing, B/M or Specification No.</u>	<u>TITLE</u>
Dwg. 4014 DURR	Installation and Assy. Swivel Caster (CT-132-17)
Dwg. 4016R DURR	Installation and Assy. Rigid Caster (CT-132-17)
	Maintenance Manuals - Link Belt (CT-132-18)
Dwg. C-50858	2" Extruder Barrel (CT-132-2)
	Installation & Maintenance Manuals (CT-132-2)
Dwg. D-50881	2" Extruder Cen'l Arrangement (CT-132-2)
Dwg. C-37588	Schematic Wiring Diagram (CT-132-2)
Dwg. C-37587	2" Metering Type Stock Screw (CT-132-2)
Dwg. C-08708A	Generator & Exciter Outline (CT-132-9)
Dwg. B-64500D	Generator Shaft Detail Outline (CT-132-9)
Dwg. A-49441	Generator Connection Diagram (CT-132-9)
Dwg. A-19125	Exciter Connection Diagram (CT-132-9)
D.S. 08125 #9	Exciter Field Rheostat Outline (CT-132-9)
G.E. Co.	Generator & Exciter Data Sheet 99309/10 (CT-132-9)
E.P. Co.	Generator & Exciter Data Sheet 99309/10 (CT-132-9)
Dwg. A-53265	Resistor Assembly (CT-132-9)
Curve 1543	Exciter Saturation Curve (CT-132-9)
Curve 1549	Symmetrical Decrement Curve (CT-132-9)
Curve 1550	Overload Heating Curve (CT-132-9)

<u>Drawing, B/M or Specification No.</u>	<u>TITLE</u>
SM-1212	Instruction & Maint. Manual (CT-132-9)
SM-1177	Installation-Operation-Maint. AC Generator (CT-132-9)
0838D0780	Metal Clad Switchgear Ct-132-3 (Side View)
0838D0780	Metal Clad Switchgear (Front View) CT-132-3
0838D0781	Side View (CT-132-3)
TT-6482630	Installation Details (CT-132-3)
Dwg. RS-A-3166	Piping and Valves to Burner (CT-132-13)
RSD-3174	Panel Arrangement (CT-132-13)
RSD-3175	Wiring Diagram (CT-132-13)
4958D-2	Burner Arrangement (CT-132-13)
33812B-4	Air Register Assy. (CT-132-13)
KS81720-9	Observation Window Assy. (CT-132-13)
MS216781	Circle Brick Arrgt. (CT-132-13)
24940C-5	Gas Lighter Assy. (CT-132-13)
20294B-3	Lighter Secondary Lead (CT-132-13)
33648B-3	Transformer Installation (CT-132-13)
SI-263044-7	Oil Atomizer Assy. (CT-132-13)
SS-256029	Atomizer Maint. Equipment (CT-132-13)
KB-98619-1	Oil Storage Tanks (CT-132-13)
132173E-1	Boiler Arrangement (CT-132-13)
60213D-2	Location Draft Connections (CT-132-13)

<u>Drawing, B/M or Specification No.</u>	<u>TITLE</u>
118997E-0	Fan and Windbox Arrgt. (CT-132-13)
120219E-1	Fan Control Valve (CT-132-13)
60258D-1	Assembly Plan View (CT-132-13)
51370C-3	Furnace Roof and Floor Plug (CT-132-13)
49463B-1	Boiler Anchor Ties (CT-132-13)
I.D. 14038	Data Sheet (CT-132-10)
I.D. 14041	Gear Drive (CT-132-10)
I.D. 14040	Header Layout (CT-132-10)
I.D. 14039	Concrete Basin (CT-132-10)
I.D. 14042	Top Plan & Framing (CT-132-10)
I.D. 14043	Sections & Framing (CT-132-10)
EA-10165	Pump Block Heater Assy. (CT-132-20)
EB-9884	Pressure Control Assy. (CT-132-20)
EA-9944	Control Panel & Wiring Diagram (CT-132-20)
A-10529	Pump Block Htr. Control Cabinet & Wir. Diag. (CT-132-20)
B/M EA 10165	Bill of Material with recommended spare parts (CT-132-20)
ICIB2-28	Data Sheet (CT-132-20)
6420538	Certified Print for Hydraulic Lift Truck (CT-132-21)
Cat. Pg. B/3	FS Series Condulets (CT-132-24)
Cat. Page B/13	Gaskets for FS & FD Series Condulets (CT-132-24)
Cat. Page B/7	Single-gand Covers (CT-132-24)

Drawing, B/M or
Specification No.

TITLE

D-8987	Laboratory Homogenizer Assy. (CT-132-35)
D-9512	Laboratory Homogenizer Outline (CT-132-35)
702562	Dimension Dwg. (CT-132-12)
702582	Wiring Diagram (CT-132-12)
662228	Wiring Diagram (CT-132-12)
706427	Wiring Diagram (CT-132-12)
G51C-040-050	Cushion Tired Truck (CT-132-21)
G-725832	Dimension Dwg. - Controller (CT-132-12) Item 373-19
G-725832	Dimension Dwg. - Controller (CT-132-12) Item 373-1.8
15-G-89	Wiring Diagram Item 373-1.9 (CT-132-12)
15-G-89	Wiring Diagram Item 373-1.8 (CT-132-12)
CS381	Installation & Startup Check List (CT-132-42)
1515E1	Installation and Operation Manual (")
P-1515	Parts List (")
E-111-1A	Operating Instructions (")
G-3292	Certificate of Performance (CT-132-42)
G-3229	Operating Log Sheet (")
G-3548	Installation Status Report (")
G-3241	Warranty Certificate (")
#105207-PS-23	Instructions (CT-132-12)
#105204-PS-25	Instructions (CT-132-12)

Drawing, B/M or
Specification No.

TITLE

PL10-601619	Parts List(CT-132-12)
PL10-601619	Parts List(CT-132-12)
E-26186-13	Longitudinal and Vertical Cross Section - 16 Knife Steep Angle (CT-132-7)
E-26186-3	Feed Roll Assembly (CT-132-7)
A-26186-2	Gear Box Assembly (CT-132-7)
B-26189	Layout-Grease Lubrication (CT-132-7)
D-26232	Instructions for Operation & Maintenance of Cumberland 6" and 8" Pelletizing Machines (CT-132-7)
	Preliminary Equipment List

CHAPTER IV FINANCIAL DATA

A.I.D. Loan Fund of US\$5,810,000 shall be paid to Chemtex by means of letter of credit issued in its favor as stipulated in Article IV of the Fixed Price Contract.

A.I.D. issued an integrated Letter of Commitment, full amount of US\$5,810,000, to the Irving Trust Bank in New York designated by us.

In accordance with the L/Com condition, as an initial, the mobilization payment of US\$871,500 was paid on April 19, 1967, and the balance of US\$4,938,500 shall be paid to Chemtex in the form of progress payments upon delivery of the equipment and/or furnishing of know-how and services by Chemtex to Kolon.

The disbursement of A.I.D. Loan Fund has incurred as follows:

Expenditure on 7.5 M/T Expansion
(A.I.D. Loan Fund)

Unit: Dollar

Invoice No.	B/L No.	B/L Date	Description	Amount
2689		4/19/67	Mobilization Payment	871,500.-
2817	3	7/3/67	Steam Boiler	65,408. <u>35</u>
2819	48	6/29/67	Fittings & Casters	2,462. <u>82</u>
2820	21	7/7/67	Steel Plates & Rings	23,672. <u>60</u>
2828	51	7/14/67	Black Steel Plates	44,194. <u>98</u>
2832	1-82335	7/18/67	Stainless Steel Plates	59,377. <u>51</u>
2837	1-82546	7/21/67	Steel Tubes	94,962.-
Total				1,161,578.<u>26</u>

Expenditures of local currency on 7.5 M/T expansion has incurred as follows:

Expenditure on 7.5 M/T Expansion Works

(Local Currency)

Unit: Won

Items	Balance carried over	'67 April	May	June	July	Total
F/N Main Plant Bldg. Structures	-	2,202,029	32,550,117	21,250,463	17,752,050	73,754,659
Preliminary Works	-	-	96,035	86,536	3,388,143	3,570,714
Temporary Works	-	-	40,000	4,914,690	40,539	4,995,229
	-	111,284	-	171,180	129,692	412,156
Sub-Total		2,313,313	32,686,152	26,422,869	21,310,424	82,732,758
(1) Salaries & Wages	467,437	307,223	432,940	447,812	463,176	2,118,588
(2) Welfare Exp.	-	10,010	10,534	640,923	15,805	677,272
(3) Office Exp.	466,694	102,012	201,012	142,657	34,621	946,996
(4) Travel Exp.	85,676	73,660	95,090	24,000	94,830	373,256
(5) Communication Exp.	83,033	2,699	200	-	200	86,132
(6) Consumables	-	11,125	46,471	14,638	-	72,234
(7) Engineers Stay Exp.	-	-	109,003	246,364	21,200	376,567
(8) Engineering Research Exp.	-	-	68,560	17,500	-	86,060
(9) L/C Open Charges	3,912,678	6,877	1,500	-	-	3,921,055
(10) Entertainment Exp.	4,944,683	1,242,325	1,561,350	236,100	106,960	8,091,418
(11) Other Expenses	592,990	4,050	5,050	-	172,393	774,483
Sub-Total	10,553,191	1,759,981	2,531,710	1,769,994	909,185	17,524,061
Grand Total	10,553,191	4,073,294	35,217,862	28,192,863	22,219,609	100,256,819

RECORD SHEET

CODE NO. _____

SHEET NO. _____

DATE _____

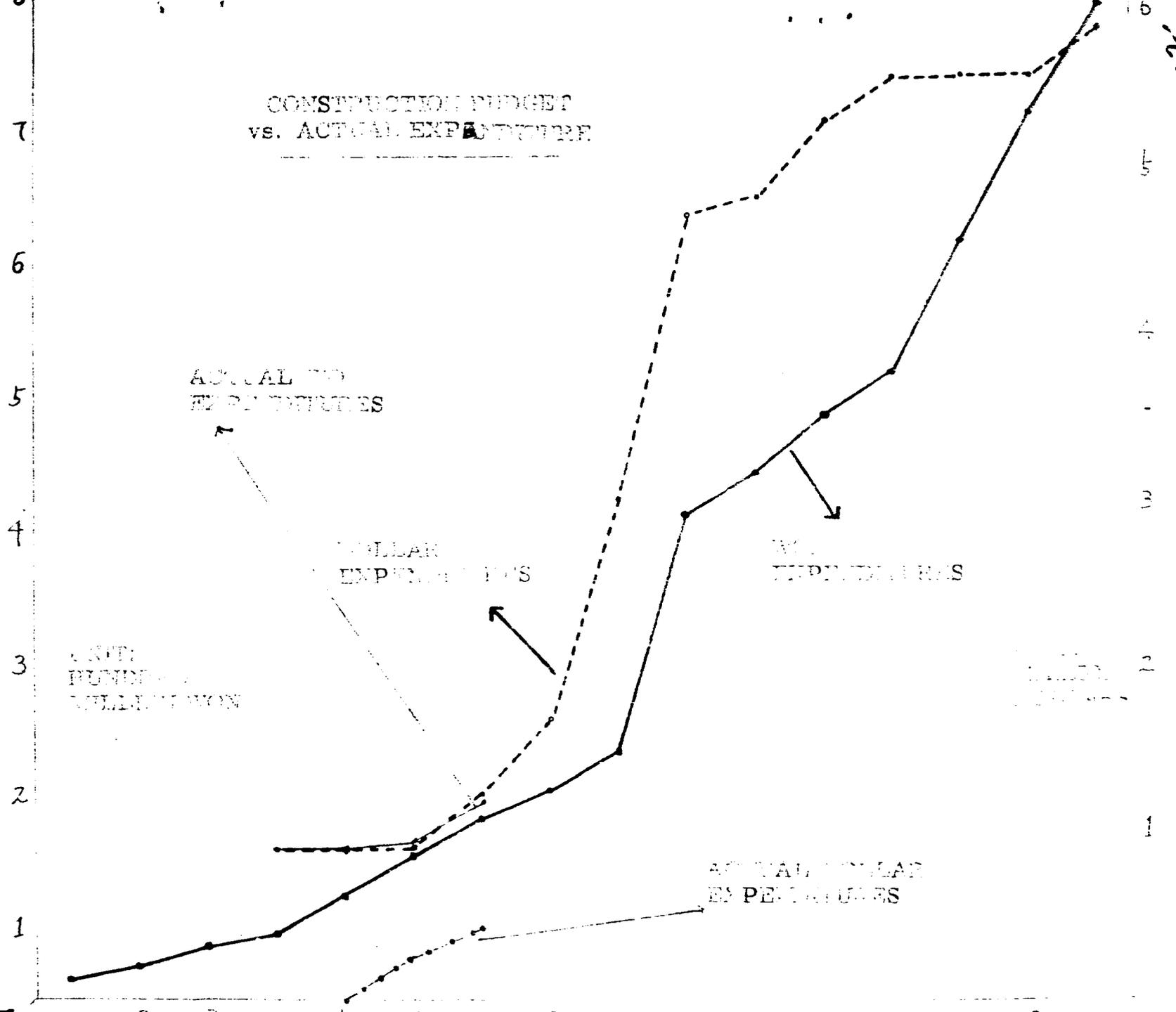
BY _____

KOREA NYLON CO., LTD.

SUBJECT _____

CHART NO. 4

CONSTRUCTION BUDGET vs. ACTUAL EXPENDITURE



UNIT: HUNDRED MILLION WON

ACTUAL DOLLAR EXPENDITURES

ACTUAL USD EXPENDITURES

BUDGET

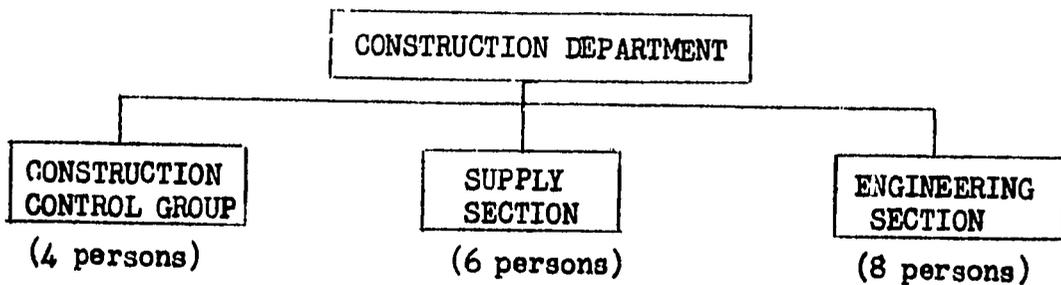
BUDGET

The great difference, shown in Chart No. 4, between the estimated local currency on construction works and actual one is caused by the fact that the estimated construction amount was drawn in consideration of construction materials for the expansion which was procured in 1966.

CHAPTER V. PERSONNEL

Kolon established tentatively an organization of Construction Department and Construction Committee in June 1966 in order to supervise and perform the construction work of 7.5 M/T Expansion successfully.

The Construction Department is under direct control of plant manager and consists of 18 persons. Following is the organization chart of the Construction Department.



The Construction Committee is set up at Head Office and consists of one chairman, one vice-chairman and several committee members. Its function is to discuss all important matters pertaining to 7.5 M/T Expansion and to recommend them to the president for the final decision.

Total labor-force employed for the period of April 1967 to July 1967 is as shown below:

Unit: Man/Day

Classification by Construction Work	Employed Labor Force			
	Constructor	Kolon	Temporary hire by Kolon	Total
Main plant building	13,716	149	-	13,865
Power house expansion	564	29	-	593
Other construction works	2,245	106	40	2,391
Total	16,525	284	40	16,849

Total employed labor force by month is as follows:

Description	April	May	June	July	Total
Main plant building	1,479	3,794	3,218	5,374	13,865
Power House	-	-	-	593	593
Other const. works	-	234	789	1,368	2,391
Total	1,479	4,028	4,007	7,335	16,849

CHAPTER VI PROCUREMENT ACTIVITIES

Under the Fixed Price Contract, Chemtex is responsible for procurement of all equipments and materials required for 7.5 M/T Expansion Project. And the local construction materials such as cements, steel bars, sand and pebbles are already procured by Kolon.

Purchase orders which Chemtex issued until July constitute about half of the total purchase orders to be issued on Expansion Plant but cover all the major equipment particularly long-term items. And Chemtex will continue to forward new purchase orders on a monthly basis to Kolon.

The following is the list of purchase orders Kolon received:

<u>P.O. NO.</u>	<u>Description</u>	<u>Spec. No.</u>
CT132-1 & C.O.No.1	Metering Pumps	
CT132-2 & C.O. No.1	Extruders	12-132a
CT132-3 & C.O. No.1	Metal Clad Switchgear	
CT132-4 & C.O. Nos.1 & 2	Drawtwisters & Take-Ups	
CT132-5	Pipe & Fittings	
CT132-6 & C.O.No.1	Spinn. Machine Drives	9-132a
CT132-7 & C.O.No.2	Chip Pelletizers	5-132a
CT132-8 & C.O.No.1	Pump Blocks	

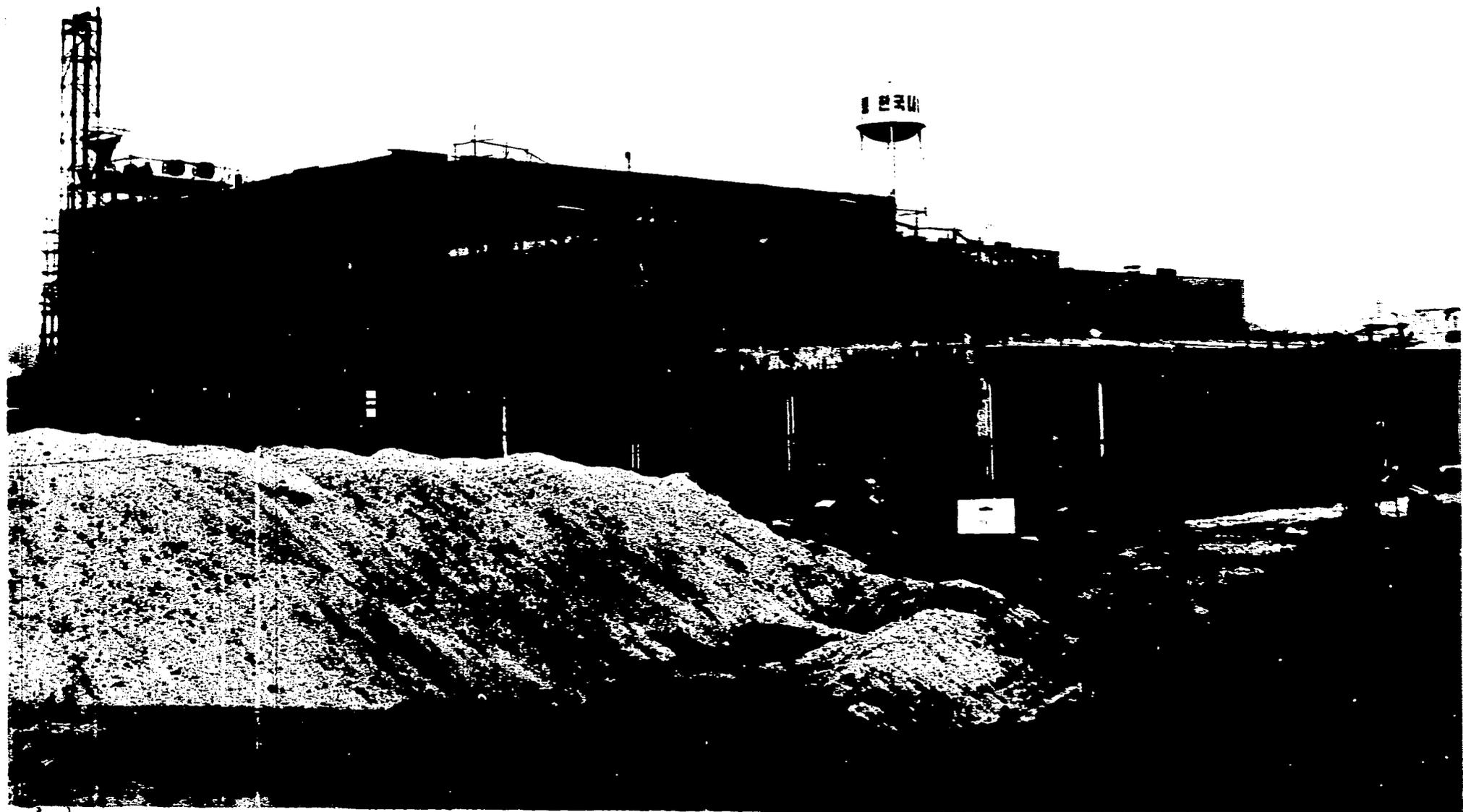
<u>P.O. NO.</u>	<u>Description</u>	<u>Spec. No.</u>
CT132-9	Diesel Generators	
CT132-10	Cooling Tower	4-132a
CT132-11	Nitrogen Plant	
CT132-12 & C.O.1,2 & 3	Instrumentation	20-132
CT132-13 & C.O.1	Steam Boilers	
CT132-14	Burn-Out Furnace	
CT132-15 & C.O.2	Water treatment Plant	2-132a 13-132a
CT132-16 & C.O.1 & 2	Sand Pack Assembly	
CT132-17 & C.O.1 & 3	Casters	
CT132-18 & C.O.1	Gear Couplings	
CT132-19	Pressure Transducers	
CT132-20 & C.O.1	Heaters & Controls	
CT132-21	Fork Lift & Pallet Trucks	
CT132-22	Water Plates	
CT132-23	Take-Up Bobbins	
CT132-24	Doffing Lights	
CT132-25	Time Delay Relays	
CT132-26 & C.O.1	Heads, Rings & Materials	
CT132-27	Copper Tubing & Fittings	
CT132-28	Pipe Fittings	
CT132-29	Transformers & Circuit Breakers	
CT132-30	Draw Pins	

<u>P.O. No.</u>	<u>Description</u>	<u>Spec. No.</u>
CT132-31 & C.O. 2	Pack Gaskets	
CT132-32	Extruder Y-Branch	
CT132-33	Spin Block Manifold	
CT132-34 & C.O. 2	Shear Pins	
CT132-35 & C.O. 1	Homogenizer	
CT132-36	D. T. Pirn Sub-Assemblies	
CT132-37	Control Panel	
CT132-38	Heads, Rings & Plate	
CT132-39 & C.O. 1	Unit Load Centers	
CT132-40	Stainless Steel Pipe	
CT132-41	Lactam transfer Pumps	17-132a
CT132-42	Water Chillers	21-132a
CT132-43	Dowtherm Vaporizers	
CT132-44	Welding Electrodes	
CT132-45	Galvanized Steel Sheet	
CT132-49	Electrostatic Tester	
CT132-51	Heliwelder	
CT132-52	Butterfly Valves	
CT132-53	Argon Gas	
CT132-54	Honeycomb	
CT132-55	Extruder Feed Adapters	
CT132-56	Ramset Guns, Charges & Studs	
CT132-57	Oxygen Minitor	

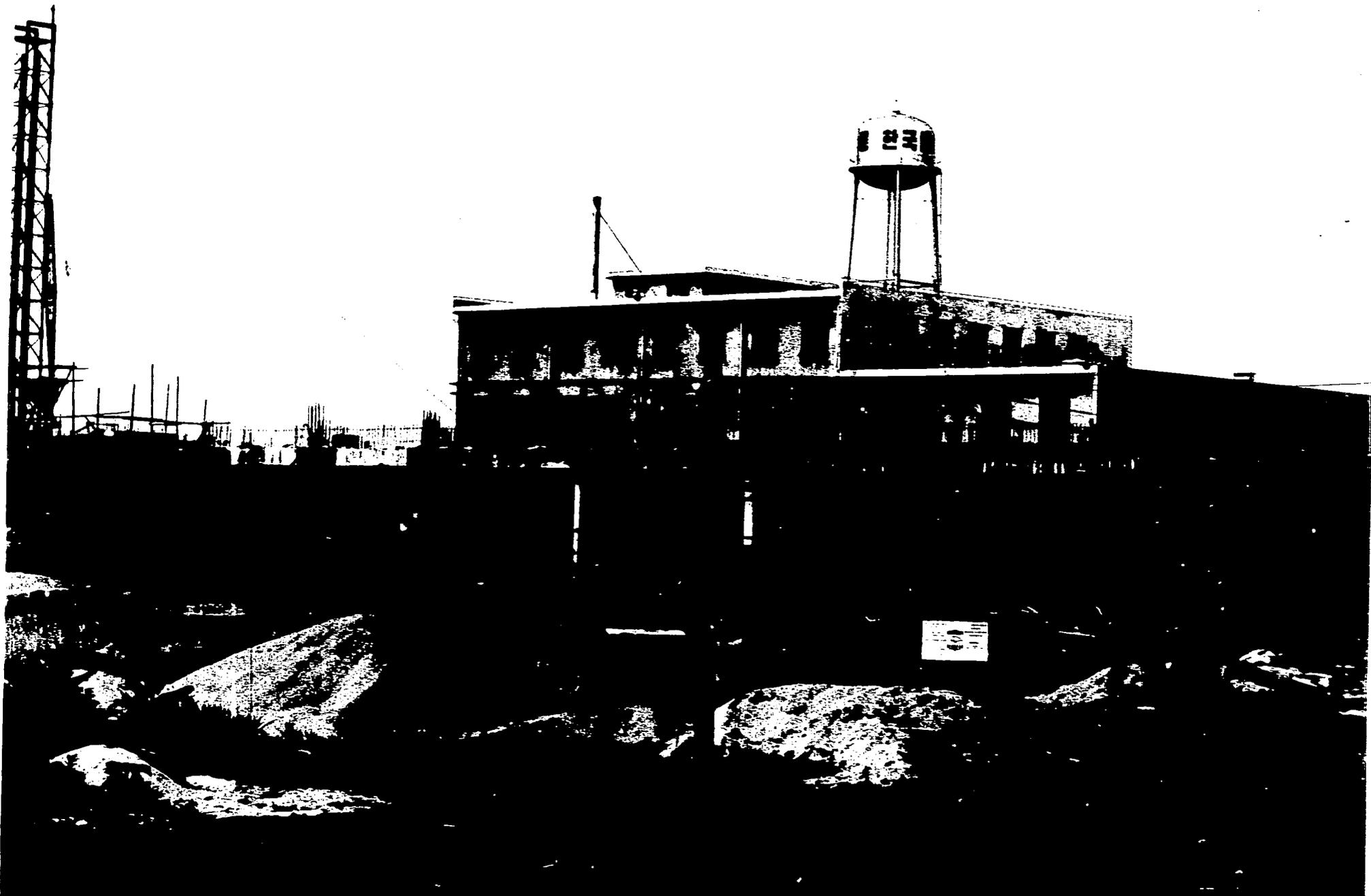
<u>P.O. No.</u>	<u>Description</u>	<u>Spec. No.</u>
CT132-58	Heatexchangers	
CT132-60	Polymerization Metering Pumps	
CT132-61	Jackhammer & Drills	

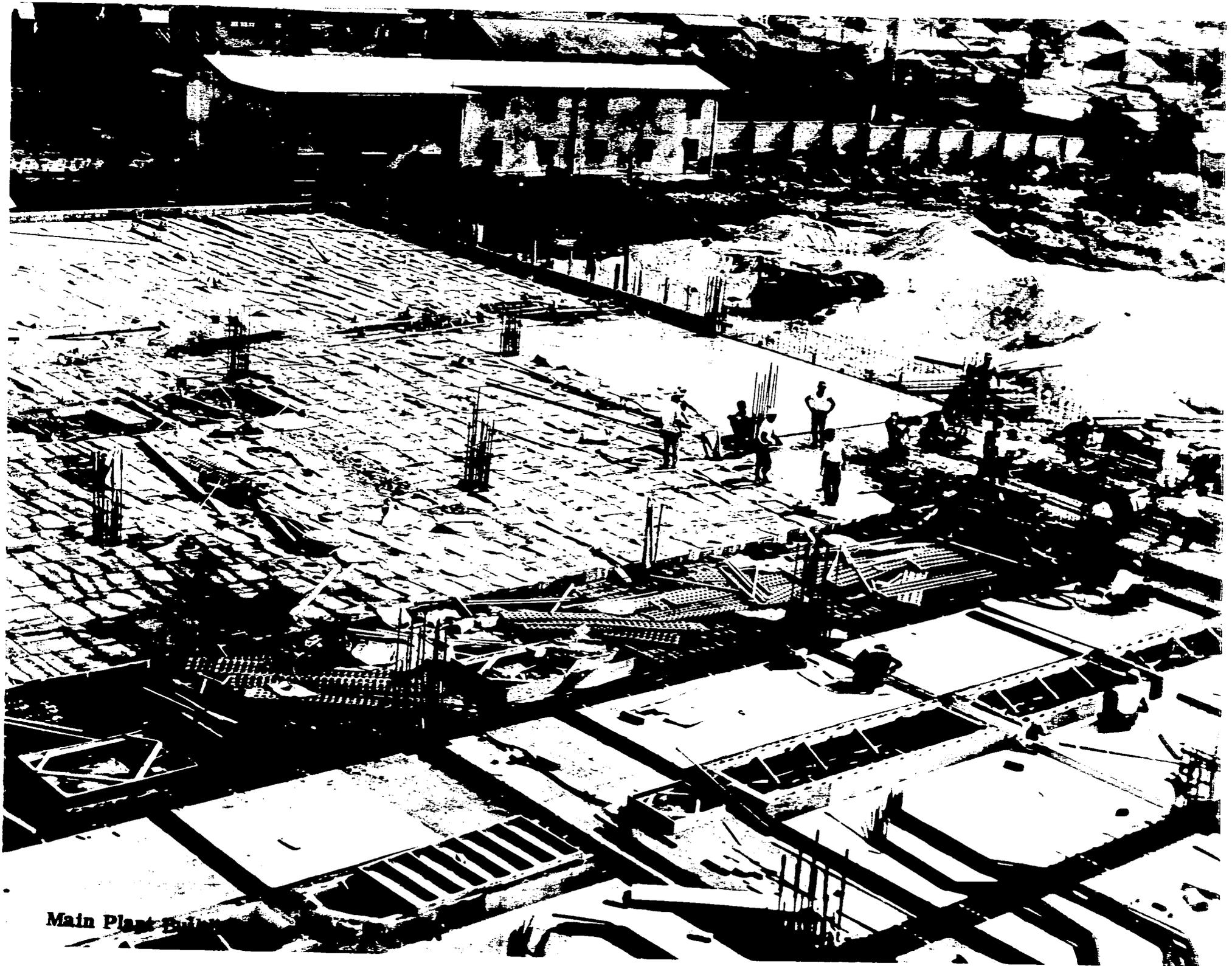
BORROWERS SHIPPING STATEMENT			2. Borrower KOREAN NYLON COMPANY			FOR A. I. D. USE		
To: Agency for International Development Washington, D. C. 20523			3. Loan Number 489-H-036			Attachment		
Our progress in meeting our obligation under the Loan Agreement to ship on U. S. flag Vessels at least fifty percent of the gross tonnage of loan financed goods transported on ocean vessels is as shown in the following tabulation.			4. Date Submitted August 21, 1967			Implementation Letter		
Signature _____ Title _____			5. For Quarterly Period Ended (Date) From April to July 1967.			Date Received		
1. Shipments From U. S. A.			Gross Tonnage		Freight Cost		Supplier Invoice Reference	
PART I - SUMMARY STATEMENT			U. S. Vessels		U. S. Dollar Equivalent		1. Number and Date	
Cumulative Totals -			Total Long Tons	Long Tons	Percent of Total	Total	Paid With Loan Funds	2. C. I. F. Value of goods U.S. Dollar Equivalent:
Shipments in Previous Quarters								
Total:								
Shipments This Quarter			659,091	659,091	100			
Cumulative Totals Through This Quarter			659,091	659,091	100			US \$ 341,626.55
PARTS II - SHIPMENTS THIS QUARTER			(d)	(e)	(f)	(g)	(h)	US \$ 341,626.55
Vessel			Gross Tonnage		Freight Cost			
Ports			U. S. Vessel		U. S. Dollar Equivalent			
Bill of Lading			Total Long Tons	Long Tons	Percent of Total	Total	Paid With Loan Funds	
1. Name	1. Exit	1. Date						
2. Registry	2. Destination	2. Description of Cargo						
(a)	(b)	(c)						
Pioneer Main U. S. A.	New York Pusan	June 29, 1967. Alloy steel plates, carbon steel rings.	12,285	12,285	100			2819-2 CT 132 July 14, 1967 US \$ 2,897.44
Pioneer Main U. S. A.	North-Carolina Pusan	July 3, 1967 2 stationary steam generating water tube power boiler s.	76,870	76,870	100			2817-1 CT 132 July 12, 1967 US \$ 76,951
Pioneer Main U. S. A.	New York Pusan	July 7, 1967 Steel fittings, Casters, pipe.	26,036	26,036	100			2820-3 CT 132 July 21, 1967 US \$ 27,850.12

Continuation Sheet		BORROWERS SHIPPING STATEMENT for Quarter Ended				Shipment From: 2/15/67		
Vessels	Ports	Bill of Lading	Gross Tonnage		Freight Cost (U. S. Dollar Equivalent)		Supplier Invoice Reference	
			Total Long Tons (/62)	U. S. Vessels Long Tons (/62)	Percent of Total	Total		Paid With Loan Funds
1. Name	1. Exit	1. Date	(d)	(e)	(f)	(g)	(h)	1. Number and Date
2. Registry	2. Destination	2. Description of Cargo						2. C. I. F. Value of Goods (U. S. Dollar Equivalent)
(a)	(b)	(c)						(i)
American Crusader U. S. A.	New York Pusan	July 14, 1967 Black steel pipe fittings, stainless steel sheets, plates. Shaft shear pins. Steel Galvanized Sheets.	245,095	245,095	100			2828-4 CT 132 July 20, 1967 US \$ 51,994.09
Steel Seafarer U. S. A.	New York Pusan	July 18, 1967 Stainless steel plates.	76,040	76,040	100			2832-5 CT 132 July 25, 1967 US \$ 69,855.90
Steel Seafarer U. S. A.	New York Pusan	July 21, 1967 Steel tubes.	222,165	222,165	100			2837-6 CT 132 August 3, 1967 US \$ 111,720

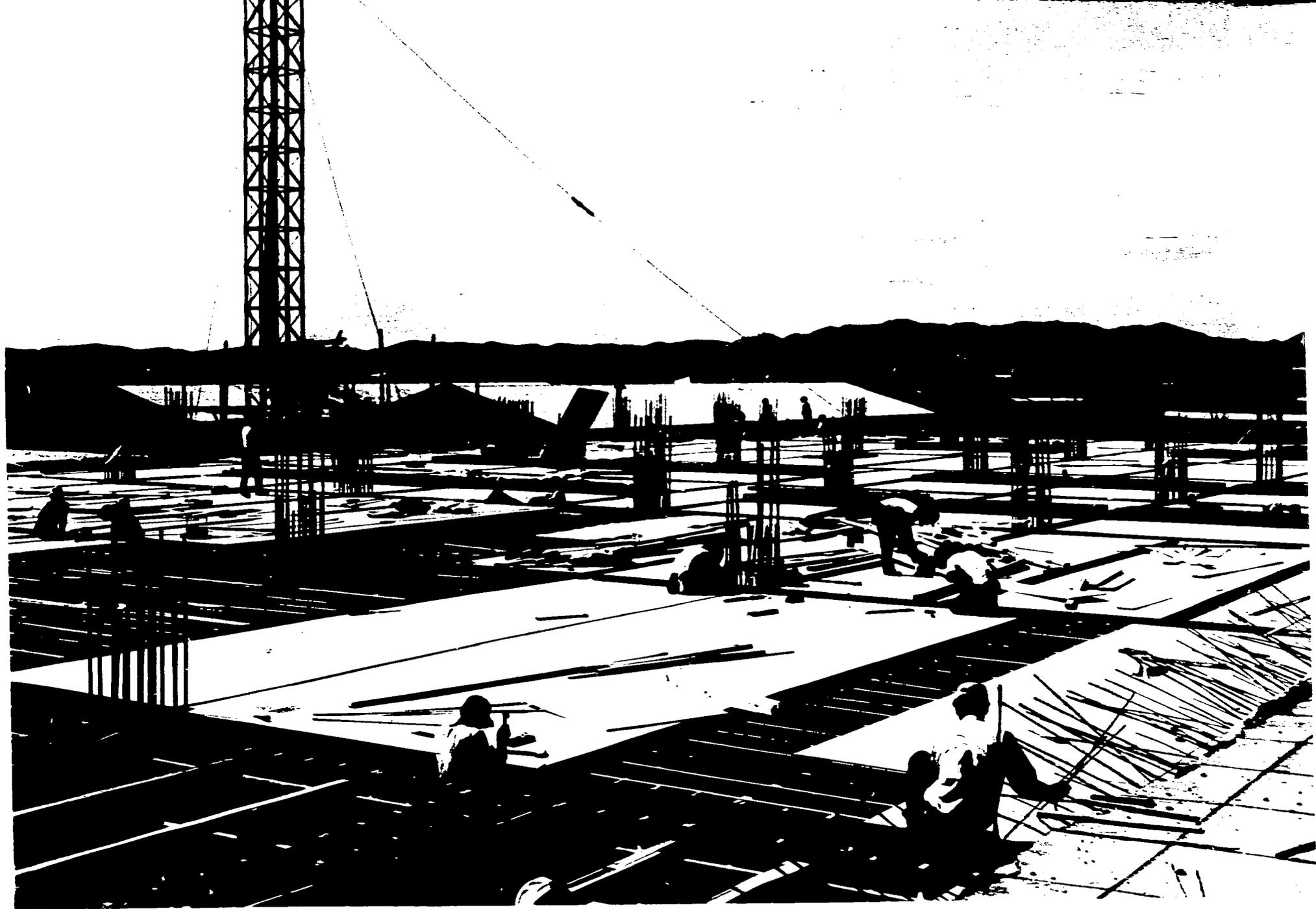


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AE
Main Plant Building



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